# PATENT CLAIMS

1. Method of extracting a tooth from the jawbone of a human being or an animal with a tooth extraction instrument, the tooth extraction instrument being able to be brought from an applying position in which the tooth extraction instrument may be applied to the tooth to be extracted into an extracting position in which the tooth extraction instrument is secured to the tooth to be extracted, comprising the steps:
applying and grasping the tooth extraction instrument assuming the approaching position to the tooth to be extracted,
fixing the tooth extraction instrument on the tooth to be extracted by transferring the tooth extraction instrument from the applying position to the extracting position, and
performing extracting movements with the tooth extraction instrument for levering out the tooth to be extracted.

2. Method in accordance with Claim 1, wherein tooth extraction forceps are used as tooth extraction instrument, the tooth extraction forceps comprising two contacting elements for application to the tooth, the contacting elements being adjustable in their mutual spacing in a clamping direction by a handling device such that the contacting elements may be brought from the applying position into the extracting position.

3. Method in accordance with Claim 2, wherein the spacing of the contacting elements from each other is adapted in rough approximation to the diameter of the tooth to be extracted prior to applying the tooth extraction instrument to the tooth to be extracted.

4. Method in accordance with Claim 2, wherein the maximum spacing of the contacting elements in the applying position is adjusted such that at most it is 25 % greater than the diameter of the tooth to be extracted prior to applying the tooth extraction instrument to the tooth to be extracted.

5. Method in accordance with Claim 2, wherein the maximum spacing of the contacting elements in the applying position is adjusted such that it is approximately 10 % to 25 % greater than the diameter of the tooth to be extracted prior to applying the tooth extraction instrument to the tooth to be extracted.

6. Method in accordance with Claim 3, wherein a minimum spacing of the contacting elements in the extracting position is adjusted such that it is smaller than the diameter of the tooth prior to applying the tooth extraction instrument to the tooth to be extracted, and wherein after adjusting the minimum spacing of the contacting elements, the tooth extraction forceps are transferred to the applying position.

7. Method in accordance with Claim 6, wherein the tooth extraction instrument is brought up close to the tooth in the extracting position for adjustment of the spacing of the contacting elements.

8. Method in accordance with Claim 6, wherein the minimum spacing of the contacting elements is adjusted such that it corresponds approximately to 0.8 to 0.9 times the diameter of the tooth to be extracted.

9. Method in accordance with Claim 8, wherein the tooth extraction instrument is brought up close to the tooth in the extracting position for adjustment of the spacing of the contacting elements.

10. Method in accordance with Claim 2, wherein the two contacting elements may be swivelled about a swivel axis relative to each other, and wherein the two contacting elements are swivelled about the swivel axis relative to each other for fixing the tooth extraction instrument on the tooth.

11. Method in accordance with Claim 2, wherein one contacting element is supported via an articulated knee lever on the other contacting element, wherein the articulated knee lever comprises two parts mounted on each other for swivel movement about a joint swivel axis, and wherein one of the two contacting elements and one of the two parts of the knee lever carry grip elements via which they may be swivelled relative to each other.

12. Device in accordance with Claim 11, wherein a distance of the joint swivel axis from the grip element of the other contacting element is smaller in the extracting position than in the applying position.

13. Method in accordance with Claim 11, wherein the articulated knee lever is moved by swivelling the two grip elements relative to each other, during transition of the tooth extraction instrument from the applying position to the extracting position, through a dead center position of the joint in which a first supporting point associated with one contacting element, a second supporting point of the knee lever associated with the other contacting element, and the joint swivel axis lie on one line.

14. Device in accordance with Claim 13, wherein the handling device is acted upon with an actuating force acting substantially parallel or opposite to the clamping direction in order to overcome the dead center position of the joint.

15. Method in accordance with Claim 11, wherein a supporting point of the knee lever is adjustable at one end.

16. Method in accordance with Claim 15, wherein a maximum spacing of the contacting elements in the applying position and/or a minimum spacing of the contacting elements in the extracting position is set by adjusting the supporting point of the knee lever.

17. Method in accordance with Claim 15, wherein the supporting point of the knee lever is defined by a swivel mounting of the knee lever on a slide sleeve, and wherein the supporting point is adjusted by displacing the slide sleeve.

18. Method in accordance with Claim 17, wherein the slide sleeve is displaced by means of a spindle drive associated with the slide sleeve.

19. Method in accordance with Claim 2, wherein the tooth extraction instrument comprises an energy accumulator, and wherein the contacting elements are movable away from each other against the action of the energy accumulator.

20. Method in accordance with Claim 6, wherein the tooth extraction instrument comprises an energy accumulator, and wherein the contacting elements are movable away from each other against the action of the energy accumulator.

21. Method in accordance with Claim 7, wherein the tooth extraction instrument comprises an energy accumulator, and wherein the contacting elements are movable away from each other against the action of the energy accumulator.

22. Method in accordance with Claim 21, wherein a supporting point of the knee lever is coupled with the energy accumulator such that the supporting point is movable against the action of the energy accumulator.

23. Method in accordance with Claim 20, wherein the energy accumulator is arranged in the area between the swivel axis and at least one of the two contacting elements.

24. Method in accordance with Claim 23, wherein the tooth extraction instrument comprises two clamping arms which include the contacting elements, and wherein at least one of the two clamping arms forms the energy accumulator by way of its inherent elasticity.

25. Method in accordance with Claim 22, wherein the energy accumulator is formed by a spring supported on the grip element.

26. Method in accordance with Claim 2, wherein the handling device comprises a stop, and wherein the handling device is actuated in such a manner during transfer of the tooth extraction instrument from the applying position to the extracting position until at least part of the handling device strikes the stop.

27. Method in accordance with Claim 26, wherein the stop is arranged on the joint part of the articulated knee lever, which connects the two grip portions of the tooth extraction instrument.

28. Method in accordance with Claim 13, wherein the handling device comprises a stop, and wherein the handling device is actuated in such a manner during transfer of the tooth extraction instrument from the applying position to the extracting position until at least part of the handling device strikes the stop.

29. Method in accordance with Claim 28, wherein for transfer from the applying position to the extracting position, the handling device is actuated in such a manner that the articulated knee lever passes through the dead center position of the joint before the at least one part of the handling device strikes the stop in the extracting position.

30. Method in accordance with Claim 2, wherein the tooth extraction instrument comprises at least one holder for one of the two contacting elements, and the at least one holder carries the said one of the two contacting elements.

31. Method in accordance with Claim 10, wherein the tooth extraction instrument comprises at least one holder for one of the two contacting elements, and the holder carries the said one of the two contacting elements.

32. Method in accordance with Claim 30, wherein at least one of the two contacting elements is mounted on the holder for rotation about an axis of rotation arranged transversely to the clamping direction.

33. Method in accordance with Claim 31, wherein at least one of the two contacting elements is mounted on the holder for rotation about an axis of rotation arranged transversely to the clamping direction.

34. Method in accordance with Claim 33, wherein the swivel axis extends parallel to the axis of rotation of the at least one rotatable contacting element.

35. Method in accordance with Claim 32, wherein at least one of the contacting elements comprises two contacting surfaces arranged adjacent each other on opposite sides of the axis of rotation and constructed so as to project in such a manner that upon application to the tooth, they place themselves substantially in the form of a point or substantially parallel to the axis of rotation in the form of a line on the tooth.

36. Method in accordance with Claim 35, wherein the contacting element with the two adjacent contacting surfaces comprises in cross section two convex sections separated from each other by a recess.

37. Method in accordance with Claim 36, wherein the recess is of arc-shaped construction and passes tangentially into the adjacent arc-shaped convex sections.

38. Method in accordance with Claim 35, wherein the contacting surfaces extend in the direction of the axis of rotation parallel thereto.

39. Method in accordance with Claim 35, wherein the contacting surfaces are inclined in the direction of the axis of rotation slightly away from the axis of rotation towards the free end of the contacting element.

40. Method in accordance with Claim 35, wherein both contacting elements are mounted on their holders for rotation about parallel axes of rotation and comprise adjacent contacting surfaces which can be placed in the form of a point or in the form of a line on the tooth.

41. Method in accordance with Claim 32, wherein the second contacting element comprises a single contacting surface which is constructed so as to project in such a manner that upon application to the tooth, it places itself substantially in the form of a point or substantially parallel to the axis of rotation of the first contacting element in the form of a line on the tooth.

42. Method in accordance with Claim 32, wherein the contacting surface of at least one of the two contacting elements is inclined in the direction of the axis of rotation slightly in the direction towards the tooth.

43. Method in accordance with Claim 2, wherein a contacting surface of at least one of the two contacting elements has a shape which is adapted to the tooth.

44. Method in accordance with Claim 2, wherein the contacting element or contacting elements are mounted in the holder so as to be exchangeable.

45. Method in accordance with Claim 44, wherein the contacting element or contacting elements are selected in accordance with the shape of the tooth to be extracted.

46. Method in accordance with Claim 32, wherein contacting element stops are provided for limiting the rotational movement of the contacting element or contacting elements.

47. Method in accordance with Claim 35, wherein the contacting surfaces are roughened.

48. Method in accordance with Claim 35, wherein the contacting surfaces are coated with diamond dust.